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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,246	01/28/2004	Robert David Nielsen	2095.001200/P3162US1	4149
23720 7590 01/10/2008 WILLIAMS, MORGAN & AMERSON 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			EXAMINER HOANG, HIEU T	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 01/10/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/766,246	<b>Applicant(s)</b> NIELSEN ET AL.	
	<b>Examiner</b> Hieu T. Hoang	<b>Art Unit</b> 2152	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This office action is in response to the communication filed on 12/04/2007.
2. Claims 1-36 are pending and presented for examination.

***Response to Arguments***

3. Applicant's arguments have been fully considered but found moot in view of new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 32-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 for instance recites "the first remote system" in the last limitation. It is not clear what is meant by "the first remote system" because "the first remote system" can be the fastest, nearest, or first responsive system, etc. For examining purposes, any of the above interpretations can be deemed proper. Correction is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-7, 9-15, 17-19, 28, 29, 31 and 35 are rejected under 35

U.S.C. 103(a) as being unpatentable over Cajolet (US 6,192,388), in view of  
Bantz et al. (US 2002/0169606, hereafter Bantz).

8. For claim 1, Cajolet discloses a method, comprising:

indicating to one or more remote systems in a distributed system that a task, in a task list, is available for processing based on a distribution list (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, fig. 7 item 136, list of assistant computers, col. 3 lines 17-21, task portion queue or list);

receiving at least one response from the one or more remote systems capable of performing the task responsive to the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and

assigning the task from the task list to a remote system of the one or more remote systems (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing).

Cajolet does not explicitly disclose the assigned remote system is the first remote system to respond.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation to process the next call)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Bantz to assign tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

9. For claim 3, Cajolet-Bantz further discloses the task is at least one of a compilation task, video processing task, audio processing task, image processing task, encryption task, and decryption task (fig. 5, 3D image rendering task), and wherein indicating to the one or more remote systems comprises indicating a threshold criterion that the one or more remote systems should satisfy, and wherein receiving the at least one response comprises receiving the at least one response from the one or more remote systems that satisfy the threshold criterion (Cajolet, fig. 8, col. 11 lines 11-60, thresholds that assistant processing computers have to pass in order to satisfy the requirement of the tasks).

10. For claim 4, Cajolet-Bantz further discloses indicating the threshold criterion comprises indicating at least one of a preselected processing speed, memory size, and network speed that is desired for the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

11. For claim 5, Cajolet-Bantz further discloses receiving the at least one response comprises receiving configuration information associated with the one or more remote systems (Cajolet, col. 8 lines 38-40, sending configuration to task dispatcher).

12. For claim 6, Cajolet-Bantz further discloses receiving the configuration information comprises receiving information including at least one of a processing speed, memory size, network speed, and load level associated with the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

13. For claim 7, Cajolet-Bantz further discloses allowing at least one of the remote systems to perform the task comprises allowing at least one of the remote systems to perform the task based on a selection scheme (Cajolet, col. 8 lines 43-53, selection of assistant computers), wherein the selection scheme comprises at least one of allowing a remote system that responds first to perform the task (Bantz, select a first available call taker workstation to process the next call) and allowing a remote system to perform the compilation task based on the received configuration information (Cajolet, col. 8 lines 39-53, selection of assistant computer based on its configuration).

14. For claim 9, Cajolet-Bantz further discloses the act of indicating comprises indicating that the compilation task is available for processing (Cajolet, fig. 6 steps 100-102, receive request for processing of an available task), and wherein

the act of receiving comprises receiving the at least one response from a remote system that has reserved at least a portion of its resources for performing the task (Cajolet, fig. 8 available resources at the assistant computers).

15. For claim 10, Cajolet discloses an article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to:

indicate to a plurality of remote systems in a distributed system that a task in a task list is available for processing based on a list identifying the remote systems (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, list of assistant computers, col. 3 lines 17-21, task portion queue or list); and

assign the task from the task list to a remote system of the one or more remote systems (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing)

Cajolet does not explicitly disclose the assigned remote system is the first remote system to respond.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation to process the next call)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Bantz to assign tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

16. For claim 11, Cajolet-Bantz further discloses the task is a compilation task (Cajolet, col. 9 lines 6-9, a rendering task composing of many task portions) and wherein the instructions when executed enable the processor to allow at least one of the plurality of remote systems based on a selection scheme (Cajolet, col. 8 lines 43-53).

17. For claim 12, Cajolet-Bantz further discloses the instructions when executed enable the processor to allow that remote system which responds first to perform the task (Bantz, [0021] lines 1-7, select a first available call taker workstation to process the next call).

18. For claim 13, Cajolet-Bantz further discloses the instructions when executed enable the processor to allow the remote system having at least one of a higher processing speed among the plurality of responding remote systems to perform the task (Cajolet, fig. 7 steps 130, 132) and a desirable performance characteristic, wherein the performance characteristic is determined based on past performance (Cajolet, col. 11 lines 20-60, past performance).

19. For claim 14, Cajolet-Bantz further discloses the instructions when executed enable the processor to allow a plurality of remote systems to perform the task in response to determining that a number of responding remote systems



exceed a number of available tasks (Cajolet, col. 9 lines 5-15, a plurality of assistant computers to process portions of a same task).

20. For claim 15, Cajolet-Bantz further discloses the instructions when executed enable the processor to receive responses from at least one of the plurality of the remote systems, wherein the response includes configuration information associated with the one or more remote systems (Cajolet, col. 8 lines 38-42, responses with computer characteristics).

21. For claim 17, Cajolet-Bantz further discloses the instructions when executed enable the processor to receive results from the at least one remote system that is allowed to perform the task (Cajolet, fig. 5, send render task and receive finished render task).

22. For claim 18, Cajolet discloses an apparatus, comprising:  
means for indicating to one or more remote systems in a distributed compilation system that a task in a task list is available for processing based on a distribution list identifying the one or more remote systems (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, list of assistant computers, col. 3 lines 17-21, task portion queue or list);

means for receiving at least one response from the one or more remote systems capable of performing the task based on the indication (fig. 6 step 104-

106, assisting computers send back response with computer characteristics that task can be done); and

means for assigning the task from the task list to a remote system of the one or more remote systems (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing)

Cajolet does not explicitly disclose the assigned remote system is the first remote system to respond.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation to process the next call)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Bantz to assign tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

23. For claim 19, Cajolet discloses an apparatus, comprising:

an interface adapted to communicate with one or more remote systems;

and

a control unit communicatively coupled to the interface, the control unit adapted to:

indicate to the one or more remote systems in a distributed compilation system that a task in a task list is available for processing based on a distribution list identifying the one or more remote systems (fig. 6 step 100, assisting

computers receive request for assistance on task processing, col. 9 lines 63-64, list of assistant computers, col. 3 lines 17-21, task portion queue or list);

receive at least one response from the one or more remote systems capable of performing the task based on the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and

assign the task from the task list to a remote system of the one or more remote systems (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing)

Cajolet does not explicitly disclose the assigned remote system is the first remote system to respond.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation to process the next call)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Bantz to assign tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

24. For claim 28, Cajolet-Bantz further discloses the control unit is adapted to identify the task that is available for processing in a queue that is accessible by one or more of the remote systems (Cajolet, fig. 7 steps 146-148, continuing to new task portion in a queue).

25. For claim 29, Cajolet discloses a distributed compilation system, comprising: one or more remote systems; a client system adapted to:

indicate to the one or more remote systems that a compilation task in a task list is available for processing based on a distribution list identifying the one or more remote systems (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 9 lines 63-64, list of assistant computers, col. 3 lines 17-21, task portion queue or list);

receive at least one response from the one or more remote systems capable of performing the compiling task based on the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and

assign the task from the task list to a remote system of the one or more remote systems (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing)

Cajolet does not explicitly disclose the assigned remote system is the first remote system to respond.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation to process the next call)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Bantz to assign tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

26. For claim 31, Cajolet-Bantz further discloses at least one of the remote systems is adapted to: detect an indication from the client system that a compilation task is available for processing (Cajolet, fig. 6 step 100, assisting computers receive request for assistance on task processing); determine if the at least one remote system is capable of processing the compilation task (Cajolet, fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and process the compilation task for the client system in response to determining that at least one remote system is capable of processing the compilation task (Cajolet, fig. 6 steps 110-112, assisting computers participate in distributed task processing).

27. For claim 35, Cajolet discloses a method, comprising:

indicating to one or more remote systems in a distributed system that a task in a task list is available for processing (fig. 6 step 100, assisting computers receive request for assistance on task processing, col. 3 lines 17-21, task portion queue or list);

receiving at least one response from the one or more remote systems capable of performing the task responsive to the indication (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and

assigning the task from the task list to a remote system of the one or more remote systems (fig. 6 steps 110-112, col. 2 line 63-col. 3 line 11, assigning task to assisting computers participate in distributed task processing)

Cajolet does not explicitly disclose the assigned remote system is the first remote system to respond.

However, Bantz discloses the same ([0021] lines 1-7, select a first available call taker workstation to process the next call)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Bantz to assign tasks to the first available workstation or assisting computer to implement a basic workload algorithm (Bantz, [0021]).

28. Claims 16, 30, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet-Bantz, in view of Hinni et al. (US 2007/0011226, hereafter Hinni)

29. For claim 36, Cajolet-Bantz further discloses the distributed system is a distributed compilation system, and wherein indicating comprises indicating to the one or more remote systems that a compilation task is available for processing (fig. 6 step 100, assisting computers receive request for assistance on task processing); wherein the indication was based on a distribution list identifying the one or more remote systems (fig. 7, 136, list of assistants), and further wherein receiving the at least one response comprises receiving the at least one response from the one or more remote systems capable of performing the compilation task responsive to the indication (fig. 6 step 104-106, assisting

computers send back response with computer characteristics that task can be done)

Cajolet-Bantz further discloses the client transmitting task request to a plurality remote computers (Cajolet, fig. 7 steps 123, 126). Cajolet-Bantz does not explicitly disclose the request from the client system was a multicast request.

However, Hinni discloses the same ([0079] lines 3-5, multicast task request to multiple task handlers)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet-Bantz and Hinni to multicast task request to a plurality of computers since multicasting is an efficient method of transmitting same information to multiple receivers (as compared to, e.g., unicasting).

30. Claims 16 and 30 are rejected for the same rationale as in claim 36.

31. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet-Bantz as applied to claim 1 above, and further in view of Harper et al. (US 2002/0087612, hereafter Harper).

32. For claim 2, Cajolet-Bantz further discloses the distribution list comprises destination addresses associated with the one or more remote systems (col. 9 lines 63-64, list of assistant computers, obviously containing their addresses), wherein

Cajolet-Bantz does not explicitly disclose:

providing a message to a router that, responsive to the message, transmits at least a portion of the message to a plurality of the remote systems based on the distribution list.

However, Harper discloses the same (fig. 2, a gateway connected to a dispatcher for transmitting task advertisements)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Harper to dispatch tasks to multiple servers or assistant computers through a gateway or a router to implement a larger or a WAN distributed system.

33. Claims 8 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet-Bantz as applied to claim 1 above, and further in view of Harper and Hinni.

34. For claim 8, Cajolet-Bantz does not explicitly disclose wherein indicating to the one or more remote systems comprises providing a message to a router that, responsive to the message, transmits, at least a portion of the message to a plurality of the remote systems based on the distribution list;

However, Harper discloses the same (fig. 2, a gateway connected to a dispatcher for transmitting task advertisements)

Cajolet-Bantz-Harper does not disclose wherein the distribution list is a multicast list, and transmitting is via multicast.



However, Hinni discloses the same ([0079] lines 3-5, multicast task request to multiple task handlers)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet-Bantz, Harper and Hinni to multicast task request to a plurality of computers since multicasting is an efficient method of transmitting same information to multiple receivers (as compared to, e.g., unicasting).

35. Claim 20 is rejected for the same rationale as in claim 8.

36. For claim 21, Cajolet-Bantz-Harper-Hinni further discloses the control unit is adapted to indicate a threshold criterion that the one or more remote systems should satisfy and further adapted to receive the at least one response from the one or more remote systems that satisfy the threshold criterion (Cajolet, fig. 8, col. 11 lines 11-60, thresholds that assistant processing computers have to pass in order to satisfy the requirement of the tasks).

37. For claim 22, Cajolet-Bantz-Harper-Hinni further discloses the control unit is adapted to indicate at least one of a minimum processing speed, memory amount, and network speed that is desired for the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

38. For claim 23, Cajolet-Bantz-Harper-Hinni further discloses the control unit is adapted to receive configuration information associated with the one or more remote systems (Cajolet, col. 8 lines 38-40, sending configuration to task dispatcher).

39. For claim 24, Cajolet-Bantz-Harper-Hinni further discloses the control unit is adapted to receive information including at least one of a processing speed, memory size, network speed, and load level associated with the one or more remote systems (Cajolet, fig. 8, col. 11 lines 11-60).

40. For claim 25, Cajolet-Bantz-Harper-Hinni further discloses allowing at least one of the remote systems to perform the task comprises allowing at least one of the remote systems to perform the task based on a selection scheme (Cajolet, col. 8 lines 43-53, selection of assistant computers).

41. For claim 26, Cajolet-Bantz-Harper-Hinni further discloses the instructions when executed enable the processor to allow that remote system which responds first to perform the task (Bantz, [0021] lines 1-7, select a first available call taker workstation to process the next call).

42. For claim 27, Cajolet-Bantz-Harper-Hinni further discloses the selection scheme comprises allowing a remote system to perform the compilation task

based on the received configuration information (Cajolet, fig. 6 steps 110-112, assisting computers participate in distributed task processing).

43. Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cajolet in view of Jones et al. (US 2002/0007389, hereafter Jones).

44. For claim 32, Cajolet discloses a method, comprising:

detecting an indication from a client system to process one or more compilation tasks (fig. 6 step 100, assisting computers receive request for assistance on task processing);

determining if a remote system that detects the indication is capable of processing at least one of the one or more compilation tasks in response to detecting the indication from the client system (fig. 6 step 104-106, assisting computers send back response with computer characteristics that task can be done); and

processing the at least one compilation task for the client system in response to at least one or more of the compilation tasks from the client system being assigned to first remote system (fig. 6 steps 110-112, assisting computers participate in distributed task processing, assigning task to the best computer based on a formula).

Cajolet does not explicitly disclose reserving one or more resources of the remote system in response to determining that the remote system is capable of processing the at least one of the compilation task

However, Jones discloses reserving a resource after determining amount of resource needed for a requested task (abstract, fig. 2, items 34-36)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Cajolet and Jones to reserve resource in response to determining that the remote system is capable of processing the at least one of the compilation task in order to make the resource of an assisting computer available when needed and therefore make distributed program running on multiple machines exhibit predictable behavior (Jones, abstract).

45. For claim 33, Cajolet-Jones further discloses providing results of the processing to the client system (Cajolet, fig. 5, send render task and receive finished render task).

46. For claim 34, Cajolet-Jones further discloses the processing comprises accessing a queue associated with the client system and determining the compilation task to process (Cajolet, fig. 7 steps 146-148, continuing to new task portion in a queue).

### ***Conclusion***

47. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

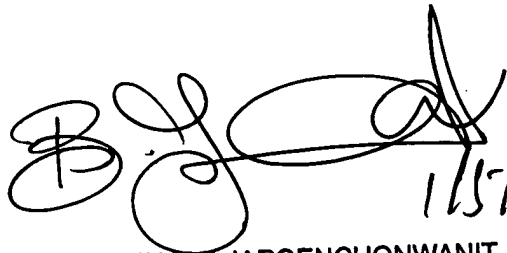
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

48. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH



1/5/08

BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER